

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,276	07/12/2000	Wolfgang Theimer	473-009548-US(PAR)	2128
2512	7590	08/27/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			WOO, ISAAC M	
			ART UNIT	PAPER NUMBER
			2172	
DATE MAILED: 08/27/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/614,276

Applicant(s)

THEIMER ET AL.

Examiner

Isaac M Woo

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7, 10-15, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 19, 2004 has been entered.

2. Claims 10 and 18 are currently amended, and claims 1 and 8-9 are canceled.  
The pending claims are 2-7 and 10-18.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-7, 10-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al (U.S. Patent No. 6,161,083, hereinafter, "Franz").

With respect to claim 18, Franz discloses, in response to an input by a user (1, inputting part, fig. 5, col. 8, lines 20-46), identifying one or more terms (S1, fig. 7, matches set phrase with identifying each term in phrase, fig. 8A, col. 16, lines 47-67), which are as appropriate as possible for this input based on a confidence value (S21, initializing priori probability  $P(E_j)$ , fig. 11, col. 20, lines 27-67, initial confidence value); determining data records that match the identified terms (initializing priori probability  $P(E_j)$ , fig. 11) as well as probability values assigned, wherein each of the probability values is calculated for each stored data record (S22, fig. 11, col. 20, lines 27-67); calculating (renewing probability, S23, fig. 11) an overall probability from the confidence value of the identified term (priori probability  $P(E_j)$ , S21, fig 11) and the probability value of the matching data record, see (S23, fig. 11, col. 21, lines 19-55); and processing the identified terms according to the overall probability, see (S24, fig. 11, col. 21, lines 19-55, overall probability (S23, S24, fig. 11) is combined the steps of S21 and S22). Franz does not explicitly disclose, data record as a ratio of the number of times this data record has been used during a certain period of time in the immediate recent past to the total number of times all the data records have been used during this certain period so as to describe the relative probability of the data record being used again. However, Franz discloses, "language model based on the hypothesis that the probability of a recently-used word appearing (being spoken) again is higher than the probability of that word first appearing is proposed, wherein recently-used words are stored in, memory means and probability of an  $i$ th word  $W_{sub.i}$  being a predetermined word  $W$  is calculated with reference to this memory means, see (col. 40, lines 47-59). This teaches

that the probability of a data based on recently-used data ratio and recently used data has high probability to be used again. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to include data record as a ratio of the number of times this data record has been used during a certain period of time in the immediate recent past to the total number of times all the data records have been used during this certain period so as to describe the relative probability of the data record being used again in the system of Franz. Because the confidence factor of high probability based on recently-used data provides more precise data confidence in data conversion system.

With respect to claim 2, Franz discloses the confidence value a value from an interval between number, preferably 1, corresponding to reliable identification, and that for an input which can not be identified, corresponding to 0, including these values, see (fig. 11, col. 21, lines 19-55).

With respect to claim 3, Franz discloses the identified terms are announced and/or displayed to a user as a system response, starting with the term identified as being the most reliable, on the basis of their overall probability, see (fig. 5, col. 8, lines 47-61).

With respect to claim 4, Franz discloses each identified term, those data records which are appropriate for the identified terms are looked for in a list of stored data

records, see (12, 13, thesaurus memory, translation dictionary, fig. 5, col. 10, lines 61-67 to col. 11, lines 1-8).

With respect to claim 5, Franz discloses when data being input, the input is completed by a data record appropriate for the identified term, using a form-based dialogue structure, see (fig. 5, col. 8, lines 35-64).

With respect to claim 6, Franz discloses that the data input is completed in response to a request signal, see (fig. 5, col. 8, lines 20-64).

With respect to claim 7, Franz discloses that the number of data records found can be reduced by inputting one or more further terms, see (fig. 5, col. 8, lines 20-65).

With respect to claim 10, Franz discloses that an announcement/display sequence of the data record is defined as a function of their overall probability, see (fig. 5, col. 8, lines 20-65, fig. 11, col. 21, lines 19-55).

With respect to claim 11, Franz discloses that the identified terms are announced and/or displayed individually and successively, or as a selection list for confirmation or selection, see (col. 21, lines 19-55, fig. 5, col. 8, lines 20-65).

With respect to claim 12, Franz discloses if the input is a voice input, the confidence value is established in the normal manner for voice recognition, see (fig. 5, col. 8, lines 20-65, fig.11, col. 21, lines 19-55).

With respect to claim 13, Franz discloses that the voice input by a user is first of all subjected to speaker identification, and in that the subsequent voice recognition process is carried out taking account of the result of the speaker identification, see (fig. 5, col. 8, lines 20-65).

With respect to claim 14, Franz discloses that the input is made via an alphanumeric input device, with the terms entered in this way first of all being assigned the confidence value for reliable identification, see (col. 21, lines 19-55).

With respect to claim 15, Franz discloses that the incorrectly alphanumerically input term, which has already frequently been input incorrectly in a manner specific to a particular user, is assigned a lower confidence value as a function of input-specific error statistics, see (fig. 5, col. 8, lines 20-65, fig.11, col. 21, lines 19-55).

With respect to claim 17, Franz discloses that the input is image input, see (fig. 5, col. 8, lines 20-65, fig.11, col. 21, lines 19-55).



***Allowable Subject Matter***

5. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMW  
August 18, 2004

  
SHAHID ALAM  
PRIMARY EXAMINER